| DATE: | August 09, 2017 |
|------------------------------------|--|
| TO: | District Contracts/ Final Plans |
| FROM: | Robert Bostian, Project Manager |
| COPIES: | <u>File</u> |
| SUBJECT: | Addendum Number 6 - Letting (mo./yr.) 08/2017 |
| | Financial Project ID <u>421390-7-52-01</u> (Lead number only) |
| | Proposal/ Contract ID ER484 |
| | Federal Funds: ☐No ☐Yes Federal Aid No. <u>D417-019-B</u> |
| | County: Broward State Road No. |
| Concurred by Signature of Alternat | Date: Aug 9 2017 e Contracting Coordinator (John Olson (primary)/ Robert Bostian (alternate)) or Designee. |
| Legal Approv | al Date: Naur Kadee and |
| | e Approval Date: Aug 9 2017 Office – Suzannah Ray) |
| CONTRACT | TIME REVISED: ⊠No ⊡Yes (If yes, Calendar Days) |
| RFP, pg. iv a | and v |
| Attachments | s revised as follows: |
| 1. U 2. U 3. S | onmental Permits SCG SE 3 rd Avenue Bridge Permit Application SACOE Permit No. SAJ-2016-00936 NWP FWMD ERP Permit No. 06-07447-P FWMD Bridge Permit ApplicationNo. 06-07522-P |
| AA.Traffi | c Concept of Operations (DRAFT) |
| EE.Train | ing and Manuals List (DRAFT) |
| HH. Sign | ing and Pavement Marking Master Plan |
| | |

RFP, pg. vi, viii, ix, and x

Reference Documents revised as follows:

2. Conceptual Design

2.4. 2015-12-11 Traction Power Sytem Load Flow Simulation ReportSummary.pdf

9. Record Drawings

- 9.2. Broward County
 - 9.2.5. Broward County Transit Pre-fabricated Bus Shelter Approved Shop Drawings.pdf
 - 9.2.6. BCTED FOC Connections.pdf
 - 9.2.7. Broward County Courthouse Water and Sewer Plan.pdf

10. Utilities Record Drawings

- 10.1. AT&T Distribution
 - 10.1.2. AT&T Conduit Elevations.pdf
- 10.5. FPL FiberNet
 - 10.5.2. Fiber Relocation at SE 6th St and 1st Avenue.pdf
- 10.6. FPL Power
 - 10.6.11. 13C5PP60 Broward Underground Sytem SE 1 Ave and SE 6 Street.pdf
- 10.11. TECO Gas
 - 10.11.4. SE 1st Ave and Courthouse Drive.pdf

RFP, Section I.C. Bid Alternatives

Revised as follows:

- 7. Landscaping along the Alignment
 - Do not furnish and install landscaping along the streetcar alignment. Note: Only plants and trees are eliminated along the alignment. Sod remains as required along the alignment- and the VMSF. Landscaping and irrigation remains at the VMSF.

RFP, Section II Schedule of Events

Table II-1: Schedule of Events

| Date | Event |
|--------------------------------------|---|
| 07/14 08/10/2017 | Question and Answer Session. Times will be assigned during the pre-proposal meeting. One hour will be allotted for questions and responses. |
| 07/2 4 <u>08/16</u> /2017 | Deadline for submittal of Written Clarification letter following Question and Answer Session 5:00 pm local time. |
| 07/25 08/17/2017 | Deadline for submittal of questions, for which a response is assured, prior to the submission of the Price Proposal. All questions shall be submitted to the Pre-Bid Q&A website by 5:00 pm local time. |
| 07/26 08/18/2017 | Deadline for submittal of written statement confirming the Design-Build Firm intends to comply fully with the requirements in the Contract Documents. |
| 07/3 1 <u>08/23</u> /2017 | Deadline for the Department to post responses to the Pre-Bid Q&A website for questions submitted by the Design-Build Firms prior to the submittal of the Price Proposal by 5:00 pm local time. |
| 08/ 02 28/2017 | Price Proposals due in District Four Office by 4011:00 am local time. |
| 08/ 02 28/2017 | Public announcing of Technical Scores and opening of Price Proposals at 11:00 am local time in Florida Department of Transportation, 3400 West Commercial Blvd., Fort Lauderdale, FL. |
| 08/07 <u>09/01</u> /2017 | Public Meeting of Selection Committee to determine intended Award at 9:00 am. |
| 08/07 <u>09/01</u> /2017 | Posting of the Department's intended decision to Award at 11:00 am. |
| 08/18 <u>09/14</u> /2017 | Anticipated Award Date |
| 09/15 10/12/2017 | Anticipated Execution Date |
| 09/15 10/12/2017 | Anticipated Notice to Proceed (NTP) |

RFP, Section V.E. Environmental Permits

Revised as follows:

SFWMD: Bridge Permit (pendingNo. 06-07522-P (approved)

RFP, Section V.E.2. Environmental

Table V.E.2-1: Local Permit Fees

| Jurisdiction | | Permit |
|----------------|------|--|
| City of | Fort | The Design-Build Firm will obtain appropriate building permits from City |
| Lauderdale | | of Ft. Lauderdale for the Vehicle Maintenance and Storage Facility |
| | | (VMSF) building and site, and Operator Rest Station; however, the City |
| | | will waive. The Design-Build Firm is responsible for all costs and fees |
| | | associated with these permits. |
| | | (This waiver does not eliminate the City design reviews and construction |
| | | inspections will still be required.) |
| Broward County | | The Design-Build Firm will obtain Environmental permits from Broward |
| | | County on behalf of the City of Fort Lauderdale related to the relocation |
| | | of City of Fort Lauderdale water and sanitary sewer facilities ; however, |
| | | the County will waive. The Design-Build Firm is responsible for all costs |
| | | and fees associated with these permits. |

RFP, Section V.K. Project Schedule

Revised as follows:

The minimum number of activities included in the Schedule shall be those listed in the Schedule of Values and those listed below:

- Electrical Utility Service Design
- Electrical Utility Service Permitting
- Electrical Utility Service Construction

RFP, Section V.AA. Rail Activation, System Integration, and Pre-Revenue Operations

Revised as follows:

The Design-Build Firm shall make available to the Department and provide access to the Vehicle Maintenance and Storage Facility and yard, alignment and Systems for the Systems Integration and post-delivery testing of the vehicles.

The Department will use its best efforts to prevent such "use" from interfering with the performance of the remaining Work and Punch List items. The Department shall not be liable for any delays or additional costs of any nature caused by such occupancy.

The Department will exercise reasonable care in operating the vehicles during the Vehicle post-delivery testing. The Design-Build Firm shall be liable for any damage to the Streetcar Systems unless the damage is clearly and directly attributable to a fault of the Department. The Design-Build Firm shall furnish all personnel, supplies, tools, equipment and other requirements during vehicle integration and acceptance tests.

The Design-Build Firm shall maintain all Work until the Engineer has given final acceptance in accordance with Section 5-11 of the Standard Specifications.

RFP, Section V.DD. Right of Way Furnished by the Department

Revised as follows:

The limits of all anticipated Project Right of Way acquisition and easements required for the Project are provided as part of RFP Attachment M, Right of Way. The Department will have all Project Right of Way easements and additional areas defined in Right of Way Maintenance Maps acquired and ready for construction (right of way certified) by July 2019. The current anticipated Project Right of Way clearance dates for the areas identified are provided in the table below.

Table V.DD.-1 ROW Acquisitions

| Area I.D. | Reason for Acquisition/ Easement | Anticipated ROW Clear Date |
|--------------|--|----------------------------|
| 1 | Parcel 100 | October 2019 |
| 2 | Parcel 101 | October 2019 |
| 3 | Parcel 102 | October 2019 |
| 4 | City of Fort Lauderdale Right of Way Maintenance | July 2018 |
| | Maps | |
| <u>54</u> | Broward County Right of Way Maintenance Maps | July 2018 |

The following encroachments have been identified along the Wave Streetcar corridor. The Design-Build Firm shall design and construct all improvements allowing the encroachments to remain as noted below.

Table V.DD.-2 ROW Encroachments

| Location | <u>Folio</u> | <u>Description</u> | <u>Status</u> |
|------------------------------------|---------------------|--------------------------|---------------------------------|
| 511 N Andrews | 504203021180 | Canopy | <u>To Remain</u> |
| 500 N Andrews | 504203021000 | Canopy | <u>To Remain</u> |
| 430 N Andrews | 504203021800 | Canopy | <u>To Remain</u> |
| 421 N Andrews | 504203021500 | Canopy | To Remain |
| 413 N Andrews | 504203021510 | Canopy | <u>To Remain</u> |
| 412 N Andrews | 504203021770 | Canopy | To be removed as needed by FDOT |
| 406 N Andrews | 504203021760 | Canopy | To Remain |
| 115 S Andrews | 504210020050 | Canopy | To Remain |
| 200 SW 1st Avenue | 504210012740 | Canopy | To Remain |
| Brickell at SE 2 nd Ave | <u>n/a</u> | Riverfront Entrance Sign | To be removed by DBF |
| W Las Olas Ave at S | 504210012891 | Riverfront Exit Sign | To be removed by |
| Andrews | | | DBF |
| 301 E Las Olas Ave | 504210AF001 0 | Canopy | <u>To Remain</u> |
| 200 SE 6th Street | <u>504210550100</u> | Canopy | To Remain |
| 200 SE 6th Street | <u>504210550100</u> | Canopy | <u>To Remain</u> |
| 1101 S Andrews | 504215011730 | Canopy | To Remain |
| 1227 S Andrews | 504215100180 | Canopy | To Remain |
| 1222 S Andrews | 504215100270 | Canopy | To Remain |
| 1230 S Andrews | 504215100280 | Canopy | To Remain |
| 1412 S Andrews | 504215101500 | Canopy | To Remain |
| 1424 S Andrews | <u>504215101510</u> | <u>Canopy</u> | To Remain |

| 1424 S Andrews | 504215101510 | Canopy | To Remain |
|----------------|--------------|---------------|------------------|
| 1507 S Andrews | 504215102211 | Canopy | <u>To Remain</u> |
| 1509 S Andrews | 504215102220 | Canopy | <u>To Remain</u> |
| 1515 S Andrews | 504215102250 | <u>Canopy</u> | <u>To Remain</u> |

The following locations have been identified by the Department for license agreements or easements. The Design-Build Firm shall include the harmonization/ modification work specified. In the event the license agreements are not secured by the Department, the Design-Build Firm is responsible for providing a complete design within the existing right of way.

| Address | <u>Folio</u> | <u>Description</u> | <u>Status</u> |
|----------------------------|---------------------|-------------------------------------|-----------------|
| 601 NE 3 rd Ave | 494234075720 | LA for sidewalk harmonization. | Acquisition is |
| | | | ongoing. |
| NE 6 th Street | 494234075730 | LA for sidewalk harmonization. | Acquisition is |
| | | | ongoing. |
| 602 NE 2 nd Ave | 494234075740 | LA for sidewalk harmonization. | Acquisition is |
| | | | ongoing. |
| 446 N Andrews | 504203021840 | LA for driveway harmonization due | Acquisition is |
| | | to road widening. | ongoing. |
| 440 N Andrews | <u>504203021810</u> | LA for driveway harmonization due | Acquisition is |
| | | to road widening. | ongoing. |
| N Andrews | 504203021801 | LA for driveway harmonization due | Acquisition is |
| | | to road widening. | ongoing. |
| 424 N Andrews | 504203021790 | LA for driveway harmonization due | Acquisition is |
| | | to road widening. | ongoing. |
| 200 E Las Olas | 504210940020 | <u>License</u> Agreement for | Acquisition is |
| | | harmonization of sidewalks, | ongoing. |
| | | removal of large trees, new | |
| | | landscaping and irrigation | |
| | | including 12 (twelve) 24' (overall) | |
| | | Montgomery Palms. Area behind | |
| | | and near station platform. | |
| 18 NW 1st Ave | <u>504210011920</u> | Permanent easement for sidewalk | Acquisition is |
| | | modifications. | ongoing. |
| 350 E Las Olas | 504210AE0020 | <u>License</u> Agreement for | Acquisition is |
| | | harmonization of sidewalks. Area | ongoing. |
| | | behind and near station platform. | |
| 633 S Andrews | <u>504210015520</u> | LA for driveway harmonization due | Acquisition is |
| | | to road widening. | <u>ongoing.</u> |

RFP, Section VI.D. Utility Coordination and Design

Revised as follows:

The Design-Build Firm shall be responsible for performing all necessary public utility relocation work, and Protection of Public utilities, regardless of circumstances. Private utility relocations are not eligible for reimbursement by the Department—and are not part of. The Design-Build Firm relocation requirements except responsible for all utility relocation fees or either new or relocated service point fees and as noted below.

RFP, Section VI.E.2.a. Roadway Design

Revised as follows:

All existing painted intersections on Las Olas Blvd and from SE 1st Avenue to SE 3rd Avenue shall be replaced with stamped asphaltic concrete. The milled and resurfaced in accordance to the pavement design requirements in RFP Section VI.E.2.c. and RFP Attachment R, Pavement Design Package.

RFP, Section VI.E.2.b. Typical Section Package

Revised as follows:

The approved Typical Sections Package is included as RFP Attachment D. The Design-Build Firm shall resubmit a complete signed and sealed typical section package for review and approval in accordance with all Project requirements. The right of way shown within the RFP Attachment D, Typical Section Package, does not represent the complete right of way in all locations. Refer to RFP Attachment M, Right of Way, for exact right of way limits.

RFP, Section VI.E.2.c. Pavement Design Package

Revised as follows:

The limits of concrete pavement shall include, at a minimum, the outside lane adjacent to the northbound and southbound track slabs and the entire area between the track slabs within the limits of the intersection. The limits of concrete intersection pavement shall extend to the north and south edge of the outside through traffic lanes on Davie Boulevard and Broward Boulevard. All narrow and irregular shaped areas within the intersections that cannot be compacted in accordance with the specifications utilizing standard asphalt compaction equipment (areas narrower than two feet wide), shall be paved with concrete pavement or with extensions of the track slab.

All narrow and irregular shaped areas within the intersections and along the alignment (areas two feet wide or narrower), shall be paved with concrete pavement or with extensions of the concrete track slab.

RFP, Section VI.E.2.c. Drainage Analysis

- Analyze inlet capacity, perform a spread analysis, and implement improvements such that water depth will not exceed 3 inches on the track slab for a rainfall intensity of 4 inches per hour.
- Analyze standing water conditions in front of station platforms to ensure compliance with the Departments drainage requirements.

Deficiencies have been identified to include but are not limited to the following locations:

 S Andrews Ave and S 13th St- Approximate Station 1027+10 E (new inlet needed at southeast corner, connect to structure at southwest corner)

RFP, Section VI.F. Geometric Design

Revised as follows:

The existing raised median along South Andrews Avenue, and NE 6th Street, will need to be retained. Modifications to the existing raised median <u>configurations</u> will be required for the safe operation of the Streetcar.

• S Andrews Avenue southbound <u>and northbound</u> left <u>to eastboundturns onto</u> 17th Street may be reduced to accommodate Station Stop #1 and streetcar turnaround.

RFP, Section VI.M.3.a. Traffic Control Requirements

- 1) General Requirements
 - g) Adjustment of traffic signals and pavement markings may be necessary to accommodate lane shifts, closures, and/or detours. The Design-Build Firm shall be responsible for coordinating with Broward County Traffic Engineering Division (BCTED) prior to making the required adjustments; Broward County will provide guidance such as suggesting signal timing, strategies and confirm whether temporary signalization and markings are permissible but will not directly implement, monitor and fine tune changes in the field;
 - h) Vehicle detection shall be maintained for all non-coordinated traffic movements (typically side-streets and mainline left-turns) throughout the construction period for all signalized intersections; Design-Build Firm shall ensure the signal contractor is experienced with troubleshooting and maintaining video detection systems. Due to the duration of this project, routine maintenance of the video detection system will be required and will be the responsibility of the signal contractor. Lane shifts at intersections will also require reconfiguration of detection zones;
 - i) Emergency response signal pre-emption shall be maintained throughout the construction period at all signalized locations that are currently equipped with emergency GPS-based pre-emption equipment;
 - r) Maintaining synchronized traffic signal operation is desirable to the greatest extent possible throughout the construction period. BCTED may be available to assist in synchronization efforts subject to systems communications and vehicle detection being maintained at the signalized intersections by the Design-Build Firm. Changes to synchronization settings that need to be incorporated into the central traffic control system shall be submitted to BCTED for review and approval;
 - w) When required due to reconstruction of existing signalized traffic control equipment and structures, Temporary Traffic Control Signals are allowed. The

Design-Build Firm shall be responsible for performing the signal timing analysis, providing recommendations, and coordinating with Broward County Traffic Engineering Division (BCTED); Broward County will provide guidance such as suggesting signal timing, strategies and confirm whether temporary signalization and markings are permissible but will not directly implement, monitor and fine tune changes in the field;

- aa) The minimum lane width for work zone travel lanes shall be 10 feet.
- aa) The minimum lane width for work zone travel lanes shall be 10 feet for all roadways that are under construction or where the construction segment has been completed. For existing roadways where construction of the segment has not started, then the existing lane width is acceptable until that segment commences construction. Once construction begins, there will be lane closures which will allow the re-distribution of the pavement width where the existing roadway does not comply with a min 10' lane width.
- hh) All bus stations and stops shall be maintained. Coordinate with BCT for temporary signage and, temporary relocationand permanent relocations that may be needed; Request to temporarily relocate bus stops shall be provided two weeks in advance of work;
- ii) Existing bus stepstops and shelters that will conflict with the proposed streetcar station stops, roadway widening, or other work shall be permanently relocated as noted. The Design-Build Firm shall prepare the site as per BCT criteria, including 2'-6" minimum between shelter roof and face of curb, for the new bus stop shelters and relocate existing shelters to the new bus stop locations:
 - (1) Relocate bus stop shelter at the SW corner of S Andrews Avenue and SW 16th Street moving to the NW corner of S Andrews Avenue and SW 16th Street. The proposed pad should be for a 7 Ft Shelter Assembly. New shelter will be installed by BCT, Design-Build Firm shall install reinforced pad and conduit.
 - (2) Relocate bus stop shelter at the NW corner of S Andrews Avenue and SW 7th Street moving to the a mid-block location between SW 7th Street and SW 6th Street on the west side of Andrews Avenue. This is a 5 Ft Shelter Assembly.
 - (3) Relocate bus stop shelter adjacent to Streetcar Station No. 40 moving 10 (east side of NE 3rd Avenue north of NE 5th Street) to the NE corner of N Andrews Avenue and NE 5th Street4th Street. The existing is a 5 Ft Shelter Assembly and will be replaced by a 7 Ft Shelter Assembly.
 - (3)(4) Relocate bus stop shelter at the NE corner of N Andrews Avenue and NE 4th Street to the SE corner of NE 3rd Avenue and NE 5th Street. The existing is a 7 Ft Shelter Assembly and will be replaced by a 5 Ft Shelter Assembly.
- pp) The Design-Build Firm shall coordinate with county staff before all traffic modifications.
- qq) The Design-Build Firm shall maintain the existing level of illumination at all locations by utilizing existing, temporary, or permanent lighting. Any temporary power or service points shall be the responsibility of the Design-Build Firm at no additional cost to the Department.

RFP, Section VI.N. Environmental Services/ Permits/ Mitigation

Revised as follows:

The details of the assessment activities, including Project information updates, are found in the following documents, included in RFP Attachments W and RFP Attachments X.

- Site Assessment Report, dated April 30, 2016.
- Level II Screening Report, dated November 17, 2016.
- Summary of Environmental Activities Report (SEAR) [In Progress].

Based on the above reports and Project conceptual plans, contamination has been identified in the following areas:

Proposed VMSF (former FEC railway facility) located at 1801 SW 1st Avenue. The
contaminants of concerns and specific locations of contamination is provided within the
SEAR. Further discussion of the VMSF is provided in Subsection V.E.3 of this RFP.

RFP, Section VI.N.2. Contaminated Soils Management

Revised as follows:

The contaminants of concerns and specific locations of contaminated soils are provided in the SEAR, noted above. Contaminated soils have been identified at the following locations within the Project corridor noted below.

RFP, Section VI.N.8. Vehicle Maintenance and Storage Facility

Revised as follows:

A Contamination Screening Evaluation Report (CSER) was completed for the proposed Wave rail corridor on August 2, 2016. The CSER documents potential contamination sites that may impact construction along the corridor. In addition, a Level II environmental assessment is in progresswas completed and will documentdocuments areas identified in the CSER that exhibit soil and/or groundwater contamination.

Upon completion of the above environmental activities, a Summary of Environmental Activities Report (SEAR) will be prepared that will provide a chronology of the environmental activities associated with the Project.

RFP, Section VI.O. Signing and Pavement Marking Plan

Revised as follows:

The Design-Build Firm shall provide a minimum of 100 3 ft x 3 ft, single post mounted signs for additional regulatory enforcement, guide, and information signing alongand pavement marking plan which incorporates the alignment RFP Attachment HH, Signing and at streetcar Pavement Marking Master Plan, and additional signing and pavement marking as necessary for safety and

operations of the Streetcar system, including yard and VMSF signage, station stop locations for transit operations.signage, intersections and special track movements.

RFP, Section VI.Q.1. Signalization Plans/ General

Revised as follows:

The traffic signal upgrades shall include the complete traffic signal construction which includes the traffic cabinet, traffic controller, all the poles, mast arms, detection loops, video vehicle detection cameras, signal heads, pedestrian signal heads, audibleaccessible pedestrian detector stations, and traffic controllerGTT Opticom, Model 760 Series GPS pre-emption equipment, where necessary or indicated. For additional information, refer to the RFP Attachment N, Traffic Signal Phasing Diagrams.

Where a pedestrian crossing is part of a signalized street intersection, control shall be provided by means of standardaccessible pedestrian traffic signals.

All new or replacement mast arms shall be painted in accordance with RFP Attachment P.

The new 144-pair fiber optic cable will cross existing lateral cables along the route, including S Andrews/ SE 17th Street and S Andrews/ Davie Blvd, and SE 3rd Avenue/ Las Olas Blvd. At the S Andrews/ SE 17th Street and S Andrews/ Davie Blvd locations, at least 200 feet of coiled cable is required to allow for future splicing into the existing fiber network. 100 feet of coiled cable is required at SE 3rd Avenue/ Las Olas Blvd.

The traffic signal 144 count that will be used by Broward County Traffic Engineering for the traffic signals shall be spliced by the Design-Build Firm to the existing Broward County fiber network at Andrews Avenue and SW 17th Street, as well as SE 3rd Avenue and Las Olas Boulevard.

Intersections where proposed traffic signals are to be constructed, 12-count fiber cable will be terminated in the new traffic signal cabinet. At least 50-feet of extra coiled cable will be required in the fiber optic pull box nearest to the traffic control cabinet. These intersections include:

- S Andrews Ave/ S 18th Street
- S Andrews Ave/ S 16th Street
- S Andrews Ave/ S 15th Street
- S Andrews Ave/ S 13th Street
- S Andrews Ave/ S 11th Street
- S Andrews Ave/ S 9th Street

RFP, Section VI.R. Landscape and Irrigation Plans

Revised as follows:

Table VI.R-1: Landscape Material

| | Common | Contain | Height/ | | Caliper | Quantit |
|----------------|--------|---------|-------------|--------|--------------------|---------|
| Botanical Name | Name | er | Spacin g | Spread | <u>/</u> Height | у |

| Sabal Palmetto | Sabal Palm | FG | 14' OA | n/a | n/a | 53 63 |
|----------------------------------|----------------------|-------|-----------------------------------|----------------|--------------------|------------------|
| Phoenix Dactylifera 'Medjool' | Date Palm | FG | 28' OA | n/a | n/a | 18 |
| Quercus Virginiana | Southern Live Oak | FG | 16' OA | 8' | 4" | 51 |
| Pyrostegia Venusia | Flame Vine | CONT. | 15" 0.C. | n/a | 15"x15" | 150 |
| Conocarpus erectus sericeus | Silver Buttonwood | FG | 12` Ht. | n/a | Multi Trunk | 4 |
| Curved Sabal Palmetto | Sabal Palm | FG | 14` O.A. | n/a | | 27 |

RFP, Section VIII.A. Bid Price Proposal

Revised as follows:

- 7. Landscaping along the Alignment
 - Do not furnish and install landscaping along the streetcar alignment. Note: Only plants and trees are eliminated along the alignment. Sod remains as required along the alignment-and the VMSF. Landscaping and irrigation remains at the VMSF.

RFP Attachment D, Typical Section Package

Revised as follows:

Typical Section Package – several sheets updated

RFP Attachment F, Technical Requirements for Bridge Construction, All Sections

Revised as follows:

References to TSP's and/or special provisions were corrected to section number and/or these requirements and/or contract documents.

RFP Attachment F, Technical Requirements for Bridge Construction, Section 465.5.12.2 Movable Bridge Functional Checkout

Construction Requirements:

- B. Tests
 - 2. Acceptance Criteria:

Control Functions (testing both manual and automatic operations)

14. Hydraulic Functions:

- a) Main Power Unit: Operate main hydraulic power units of each of the leafs under the following conditions; record flow and pressure, and angle of opening versus time during operation.
 - (1) Operation with both pumps and all cylinders on line.
 - (2) Operation with one pump and all cylinders on-line (one test per pump).
 - (3) Operation with both pumps and two cylinders; take two cylinders off line and disconnect from the leaf.
- b) Demonstrate operation of temperature and low level switches:
- c) Lower fluid level to just above low-level point and attempt operation of the leaf.
- d) Heat hydraulic fluid to shutdown temperature with immersion heater.
- e) Hydraulic Cylinders: Demonstrate manual release of fluid in cylinders back to tank under no power condition.

RFP Attachment G, Transit Criteria, Revision Record

Revised as follows:

| REV. | REV. | SECTIONS | COMMENTS |
|----------|----------|----------------------------------|------------|
| DATE | NO. | AFFECTED | |
| 08/04/17 | <u>4</u> | Sections 1, 2, 3, 4, 5, 7 and 10 | Addendum 6 |

RFP Attachment G, Transit Criteria, Section 1.5 Systems General Design Principles

Revised as follows:

Warranty: All product warranties shall begin at Final Acceptance.

RFP Attachment G, Transit Criteria, Section 2.2.1.3.4 Maintenance and Emergency Evacuation Paths

Revised as follows:

A minimum clear width of 30 inches shall be provided between the Dynamic Envelope and any continuous obstruction, e.g. wall, etc., alongside the track to create a walkway for maintenance personnel and to create a designated passenger emergency evacuation path.

RFP Attachment G, Transit Criteria, Section 3.1.1 Mainline Tracks

Revised as follows:

An 8'-4" wide reinforced cast in place concrete track slab will provide the foundation for this type

of track construction.

RFP Attachment G, Transit Criteria, Section 4.2.4 Yard Track Layout

Revised as follows:

Phase 1 of this project will operate five vehicles. However, The Design-Build Firm shall design and construct the yard to provide storage and maximize operations to accommodate the future fleet size of not less than twelve, 82-foot streetcar vehicles, with room to maneuver and without interruption of Wave Streetcar service. The Design-Build Firm shall design the yard based on the selected streetcar vehicle characteristics. The final yard configuration shall be coordinated with and approved by both the Department and Broward County. The Design-Build Firm shall design the yard such that there is no interference with streetcar vehicles departing or arriving from the mainline. Initially the project will operate five streetcar vehicles.

RFP Attachment G, Transit Criteria, Section 4.3.19.2 Air-Conditioning System for Offices and Admin Support Spaces (basis-of-design)

Revised as follows:

Alternate air-conditioning systems design yielding equivalent basis of design system energy efficiencies and complying with LEED certification requirements will be considered. Provide alternate bid price.

RFP Attachment G, Transit Criteria, Section 4.3.23 VMSF Functional Elements

Revised as follows:

Streetcar vehicle storage (5 in Phase 1 and up to 12 in future phases);

RFP Attachment G, Transit Criteria, Section 4.3.25.8.2 Interior Cleaning Position

Revised as follows:

A dedicated cleaning position that could include a canopy and small structure to house a storage room and utility room for power, water, <u>and</u> compressed air, <u>and an interior vacuum system to be supplied to cleaning positions.</u> Wipe down function, vacuuming capability (<u>fixed unit station system or back pack units</u>), trash collection and sand box filling (mobile sanding cart versus a storage silo with sand distribution system) are also other tasks that are typically performed at the Cleaning Position.

RFP Attachment G, Transit Criteria, Section 4.3.27 Electrical Services

Revised as follows:

The shop substation negative return will not be solidly grounded to the building ground network

for safety purposes, but the shop rails shall be grounded by bonding the shop rails directly to the VMSF grounding ring and to the rail support beams in the inspection pit.

RFP Attachment G, Transit Criteria, Section 5.3.13 Disconnect Switches

Revised as follows:

Disconnect switches, not located at the TPSS, will be hook stick operated no-load break switches mounted on OCS poles in FRP enclosures. See Figure 5-8 for typical detail (FRP enclosure not shown in the figure for clarity). Pad-mounted disconnect switches shall be provided at the TPSS sites. The disconnect switches and tie-switches will be enclosed in a non-metallic lockable enclosure and the Open status and the Closed status will be wired to the TPSS RTU for display at the TPSS annunciator and at OCC. The disconnect switches and tie-switches shall have interlock circuits to prevent opening the switch under amperage load conditions and shall have voltage indication LEDs for the line- side and load-side of each switch.

RFP Attachment G, Transit Criteria, Figure 5.8 Typical Disconnect Switch

Revised as follows:

Figure updated.

RFP Attachment G, Transit Criteria, Section 7.4. Operational Design Requirements

Revised as follows:

- The Design-Build Firm shall coordinate with the Department to determine which of the two
 options listed below will be selected by the City and designed and installed by the DesignBuild Firm for the Turnback interlocking prior to Streetcar station #4 (SE 6th Street). The
 two options are:
 - a. Full closure of the street
 - i. Design-Build Firm shall reverse the turnback.
 - b. Vehicle traffic in one direction (east)
 - i. Design-Build Firm shall design and install the turnback as shown in the design criteria and provide a traffic signal controlled by the TWCan interface to the SE 6TH and SE 3RD Ave traffic signal. This design shall include a protected move allowing the streetcar to transition from streetcar station #4 back to South Andrews Ave. through the crossover, controlled by the TWC. During this streetcar transition, no vehicle traffic shall be allowed onto SE 6TH Street and a Blank out sign shall be included to alert vehicles of this streetcar move.

In either option, two-way vehicular traffic shall be accommodated along SE 6th Street, east of the SE 6th Street station stops and east of South Andrews Avenue to SE 1st Avenue.

Figure 7-1 Signal System Overview – Full Build out updated

Figure 7-1c Signal System Overview updated RFP Attachment G, Transit Criteria, Section 10 Streetcar Station Stops Revised as follows: This section needs to be used in conjunction with RFP Attachment H, Technical Requirements for Transit Construction, and RFP Attachment V, TransitStreetcar Station Stop Details. RFP Attachment G, Transit Criteria, Section 10.1.1 Stop Platform Configuration and Location Revised as follows: Narrow-center platforms shall have the shelters staggered to allow enough room to cross in front of the shelters without going into the detectable warning strip, see TransitRFP Attachment V, Streetcar Station Stop Details. RFP Attachment H.1. Volume 1 Track and Miscellaneous, Section 800 Revised as follows: Updated RFP Attachment H.2. Volume 2A Systems: Traction Power Supply and Distribution, Signal and Route Control, Fare Collection, Systems Integration, Section 810 Revised as follows: Updated RFP Attachment H.3. Volume 2B Systems Communications, Section 840 Revised as follows: Updated RFP Attachment H.4. Volume 3A Vehicle Maintenance and Storage Facility Building, Equipment, and Furnishings, Section 860 Revised as follows:

| Updated |
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| RFP Attachment H.5., Volume 3B Vehicle Maintenance and Storage Facility Mechanical, Electrical, Plumbing and Fire-Protection, Section 880 |
| Revised as follows: |
| Updated |
| RFP Attachment H.6., Volume 4 Sustainability, Section 890 |
| Revised as follows: |
| Updated |
| RFP Attachment L, Streetcar Regulations Plan |
| Revised as follows: |
| Updated |
| RFP Attachment M.2., Existing ROW Maps |
| Revised as follows: |
| Updated |
| RFP Attachment N, Traffic Signal Phasing Diagrams |
| Revised as follows: |
| Updated |
| RFP Attachment R.1., Flexible Pavement Design |
| Revised as follows: |
| Typical Section Sheets Updated |
| RFP Attachment S.4., Environmental Permits |

New Attachment SFWMD Bridge Permit No. 06-07522-P RFP Attachment V, Streetcar Station Stop Details Revised as follows: Updated RFP Attachment Z, Operations and Maintenance Plan (DRAFT) Revised as follows: Updated RFP Attachment AA, Traffic Concept of Operations (DRAFT) Revised as follows: Updated RFP Attachment BB, VMSF Concept of Operations (DRAFT) Revised as follows: Updated RFP Attachment HH, Signing and Pavement Marking Master Plan Revised as follows: New attachment RFP Reference Document 2.5.1., Alignment CADD Files and List Revised as follows: Updated Streetcar Station Stop CADD files New Subsurface Utility Survey CADD files

Revised as follows:

Approved Shop Drawings

RFP Reference Document 9.2.5., Broward County Transit Pre-fabricated Bus Shelter

| New reference document |
|--|
| RFP Reference Document 9.2.6. BCTED FOC Connections |
| Revised as follows: |
| New reference document |
| RFP Reference Document 9.2.7. Broward County Courthouse Water and Sewer Plan |
| Revised as follows: |
| New reference document |
| RFP Reference Document 10.1.2. ATT Conduit Elevations |
| Revised as follows: |
| New reference document |
| RFP Reference Document 10.5.2. Fiber Relocation at SE 6th St and 1st Avenue |
| Revised as follows: |
| New reference document |
| RFP Reference Document 10.6.11. 13C5PP60 Broward Underground Sytem SE 1 Ave as SE 6 Street |
| Revised as follows: |
| New reference document |
| RFP Reference Document 10.11.4. SE 1st Ave and Courthouse Drive |
| Revised as follows: |
| New reference document |